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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/663,977

09/17/2003

Hirohisa Tanabe

031794-3

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10/29/2008

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EXAMINER

YANCHUS III, PAUL B

ART UNIT

PAPER NUMBER

2116

MAIL DATE

DELIVERY MODE

10/29/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/663,977	<b>Applicant(s)</b> TANABE ET AL.	
	<b>Examiner</b> PAUL B. YANCHUS III	<b>Art Unit</b> 2116	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 07 August 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 4-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 4-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

This non-final office action is in response to amendments filed on 8/7/08.

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wright et al., US Patent no. 6,467,042 [Wright], in view of Dean et al., US Patent no. 6,434,704 [Dean].

Regarding claim 4, Wright discloses an interface circuit provided for each of a first device set as a master side and a second device set as a slave side, for performing a serial data transmission between the first and second devices on the basis of a control signal which is output from the master side, comprising:

a detection portion which monitors the control signal output a detection signal when there is a change in the control signal [TRAFFIC DETECT in Figure 2 and column 3, lines 21-29].

a process control portion which generates and switches an operation-enable signal and operation disable signal each time the detection signal is supplied thereto [SUSPEND/SLEEP CONTROLLER in Figure 2 and column 3, lines 21-29];

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an oscillation circuit which generates a clock signal for data transmission only when the operation-enable signal is supplied thereto [CLOCK GENERATOR in Figure 2 and column 3, lines 30-35 and column 4, lines 14-19]; and

a transmission function portion which performs the serial data transmission on the basis of the clock signal [CLK2 is provided to SIE, which communicates via USB, Figure 2 and column 3, lines 19-20].

Wright discloses selectively supplying a clock signal to circuits in devices according to an operation enable signal. Wright is silent as to how the operation-enable signal acts to selectively supply the clock signal to the circuits in the devices. Dean discloses that clock gating is a well known method of selectively providing clock signals to certain circuit blocks in devices [column 1, lines 21-30 and column 3, lines 40-47]. It would have been obvious to one of ordinary skill in the art to use the well known clock gating scheme in the Wright devices to perform the selective clock supplying according to the operation-enable signal.

Regarding claims 5-7, Wright, as described above, discloses a detection portion, which monitors the control signal to output a detection signal when there is a change in the detection signal. Wright is silent as to the specific components that are inside the detection portion. Applicant(s) numerous definitions of the internal circuitry of the detection portion is construed to be an admission that the criticality does not reside in the type of internal circuitry utilized in the detection portion and hence are obvious variations of one another.

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Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wright et al., US Patent no. 6,467,042 [Wright] and Dean et al., US Patent no. 6,434,704 [Dean], in view of Dehghan, US Patent no. 6,275,087.

Wright and Dean, as described above, disclose a detection portion, which monitors the control signal to output a detection signal when there is a change in the detection signal. Wright and Dean are silent as to the specific components that are inside the detection portion and therefore do not explicitly disclose a noise removal circuit for removing noise components from the control signal. However, as shown by Dehghan [column 6, lines 40-52], using noise removal circuitry in signal detection circuits is well known in the art. It would have been obvious to one of ordinary skill in the art to use well known noise removal circuitry in the Wright detection portion of the interface circuit.

### ***Response to Arguments***

Applicant's arguments with respect to claims 4-9 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PAUL B. YANCHUS III whose telephone number is (571)272-3678. The examiner can normally be reached on Mon-Fri 10AM-2PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Lee can be reached on (571) 272-3667. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Paul B Yanchus/  
Examiner, Art Unit 2116

October 24, 2008

/Thomas Lee/  
Supervisory Patent Examiner, Art Unit 2115